Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Benthic Surveys in Faga'alu, American Samoa: belt transect surveys of corals in March and August of 2012

1.2. Summary description of the data:

The data described here were collected in Faga'alu, American Samoa in March and August 2012 via belt transect surveys of corals by the NOAA Coral Reef Ecosystem Program (CREP). At a survey site, divers deployed two 25-m transects to gather information on the coral communities present there, including diversity and health status, and within each transect three 5-m segments were surveyed (beginning at 0m, 10m, and 20m). Within each segment, all coral colonies whose center fell within 0.5m of either side of the transect were identified to genus. Cases of disease and impaired health were also recorded and the type of affliction was documented.

These data can be accessed online via the NOAA National Centers for Environmental Information (NCEI) Ocean Archive. Additionally, LPI surveys were conducted in 2012, coral demographic surveys were conducted in 2013 and 2015, photoquadrat benthic images were collected in 2012 and 2015, and the 2015 images were analyzed for benthic cover composition (all documented and archived separately).

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

2012-08-14 to 2012-08-16, 2012-03-28 to 2012-03-30

1.5. Actual or planned geographic coverage of the data:

W: -170.6808019, E: -170.6726317, N: -14.28706602, S: -14.29516353 Location of belt transect surveys in Faga'alu in 2012.

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Not applicable Platform: Not applicable

Physical Collection / Fishing Gear: Not applicable

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

Annette M DesRochers

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

annette.desrochers@noaa.gov

2.5. Phone number:

(808)725-5461

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Bernardo Vargas-Angel

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

Belt transect surveys of corals (version d): belt transect survey with genus-level / disease observations

Process Steps:

- REA surveys are investigations that provide a high degree of taxonomic resolution for coral, algae, and other macroinvertebrate communities, During REA surveys, biological assessment teams follow highly structured protocols that are repeated at each REA site. Upon arrival at an REA site, divers entered the water and deployed two 25 m transect lines which are shared with coral surveys that gather community structure, diversity, recruitment, and health status data. The sampling effort takes between 60 and 80 min to complete. The selection of REA sites was made implementing a randomization tool on a GIS habitat bathymetry map of Fagaalu Bay, and the spatial effort allocation was proportional to the percentage of target reef habitat within two main depth strata (shallow: ~ 630 ft, and medium: 3060 ft). Factors considered during REA site selection included ensuring a range of sample sites representative of the benthic and reef fish habitats in the Bay. It is important to note that access to REA sites can be limited by wave exposure, weather conditions, and other environmental factors such as currents. Transect placement was guided by: (1) a focus on hard-bottom communities; (2) deploying lines along an isobath to the extent possible at each site, and (3) laying the transect lines into the prevailing current.
- Within each of the two 25m transects, three 5m segments are surveyed (beginning at 0m, 10m, and 20m). In each segment, all coral colonies whose center falls within 0.5m of either side of the transect will be identified to the genus level and recorded. Cases of disease, impaired health, and partial mortality will also be recorded and any information on type of affliction documented (bleaching, skeletal growth anomaly, white syndrome, subacute tissue loss, band diseases, necroses, pigmentation responses, algal and fungal infections, as well as other diseases of unknown etiology, and predation).
- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- **5.2. Quality control procedures employed (describe or provide URL of description):** The data is quality controlled against the physical data sheets following data entry.

There are also several queries in the MS Access / Oracle database to flag errors based on pre-defined criteria.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

- 6.1.1. If metadata are non-existent or non-compliant, please explain:
- 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

- 6.2.1. If service is needed for metadata hosting, please indicate:
- 6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/25283

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

- 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?
- 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

National Centers for Environmental Information - Silver Spring, Maryland (NCEI-MD)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

http://accession.nodc.noaa.gov/0169729

7.3. Data access methods or services offered:

Data can be accessed online via the NOAA National Centers for Environmental Information (NCEI) Ocean Archive.

7.4. Approximate delay between data collection and dissemination:

Unknown

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended) NCEI MD

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Pacific Islands Fisheries Science Center - Honolulu, HI

8.3. Approximate delay between data collection and submission to an archive facility:Unknown

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

NOAA IRC and NOAA Fisheries ITS resources and assets.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.